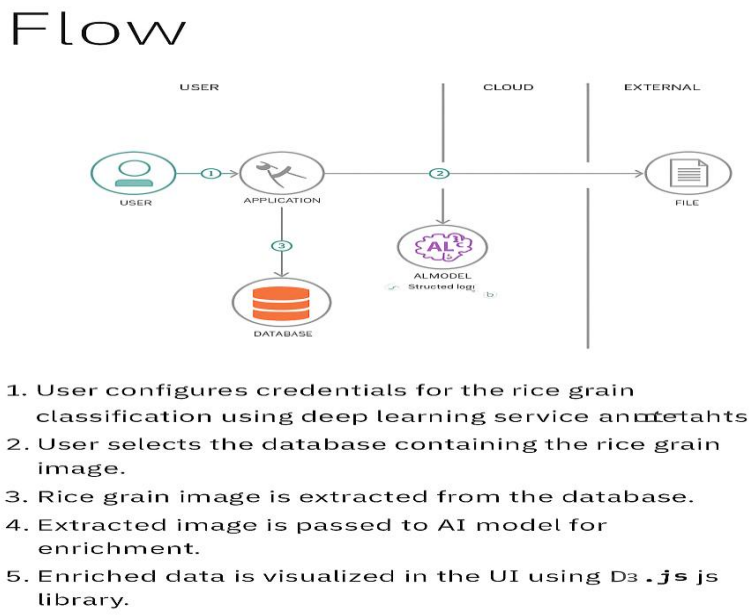
Project Design Phase-II
Data Flow Diagram & User Stories

Date	31 January 2025
Team ID	LTVIP2025TMID33633
Project Name	GrainPalette – A Deep Learning Odyssey in Rice Type Classification Through Transfer Learning
Maximum Marks	4 Marks

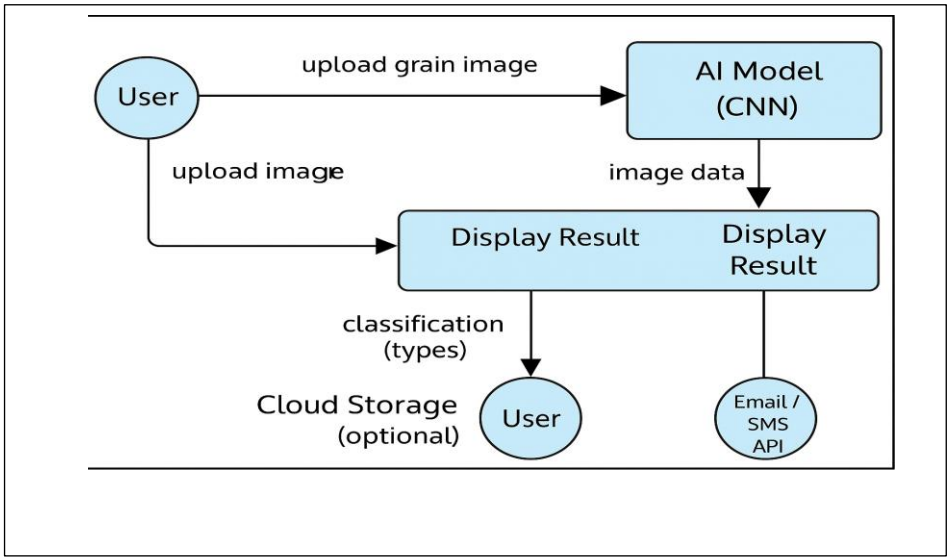
Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Example: (Simplified)



Example: DFD Level 0 (Industry Standard)



User Stories for GrainPalette – Rice Type Classification System

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance Criteria	Priority	Release
Farmer (Web/Mobile User)	Upload Image	USN-1	As a farmer, I can upload a rice grain image to the application	Image is uploaded and processed	High	Sprint-1
		USN-2	As a farmer, I can view the predicted rice type with a confidence score	Rice type name and confidence score are displayed	High	Sprint-1
		USN-3	As a farmer, I can view sample images for each rice type	Sample images are shown clearly for reference	Medium	Sprint-2
		USN-4	As a farmer, I can view my previous prediction history	Prediction history is saved and shown to user	Low	Sprint-3
Quality Inspector	Report Generation	USN-5	As a quality inspector, I can generate a report of rice types identified in a session	A downloadable report is generated with type, date, and image	Medium	Sprint-2
System Admin	Manage Dataset	USN-6	As an admin, I can upload or manage rice type images to improve model accuracy	Dataset updated and reflected in model training	High	Sprint-1
		USN-7	As an admin, I can re-train the model after updating dataset	System confirms re-training and shows updated metrics	High	Sprint-2
	User Management	USN-8	As an admin, I can manage farmer and inspector user accounts	Admin can view, add, or deactivate users	Medium	Sprint-3